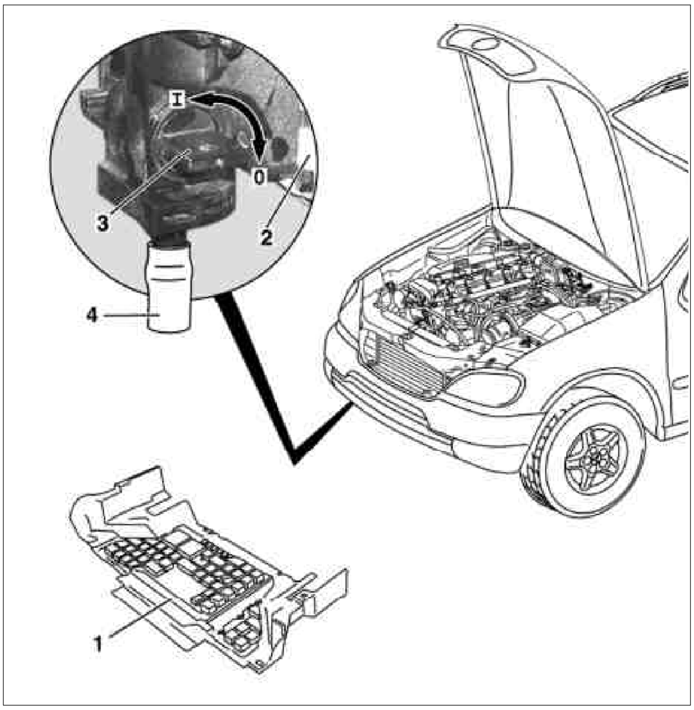
ENGINE 612.963 in MODEL 163.113

1 Front noise encapsulation bottom part
2 Radiator
3 Radiator drain tap
4 Siphon hose



P20.20-2083-12

	Draining		
⚠ **Danger!**	**Risk of injury** to **fingers being jammed or pinched** when removing, installing or aligning hoods, doors, trunk lid/tailgate or sliding roof.	When moving components, ensure that no body parts or limbs are within the operating range of moving parts.	AS00.00-Z-0011-01A
⚠ **Danger!**	**Risk of injury** to skin and eyes suffering scalding from contact with hot coolant spray. **Risk of poisoning** from swallowing coolant.	Do not open cooling system unless coolant temperature is below 90 °C. Open cap slowly and release the pressure. Do not pour coolant into beverage bottles. Wear protective gloves, protective clothing and eye protection.	AS20.00-Z-0001-01A
1	Open engine hood and raise to vertical position	Have assistant secure hood.	AR88.40-P-1000GI
2	Open cap of coolant expansion reservoir	Turn cap half a turn in the anti-clockwise direction, release pressure, and then unscrew cap.	
3	Remove front noise encapsulation bottom part (1)		
4	Attach siphon hose (4) to drain connection of radiator		
5	Drain coolant at radiator (2) on right	To do this, turn drain tap (3) at radiator (2) into position "1" (arrow). Disposal of coolants. Pay attention to legal provisions or local wastewater regulations! Refer to Environmental Protection Catalog issued by MBVD/PWU for locations in Germany.	
6	Clean cooling and heating system	Clean cooling and heating system in case of impurities. See # Remove oil from cooling and heating system.	AR20.00-P-1250B
	Pour in		
	Notes on coolant	All engines	AH20.00-N-2080-01A
7	Turn drain tap (3) at radiator (2) into position "0" (arrow)		

⚠ **Danger!**	**Risk of accident** caused by vehicle starting off by itself when engine is running. **Risk of injury** caused by contusions and burns when working in engine during starting procedure	Secure vehicle to prevent it from moving. Wear closed and snug-fitting work clothes. Do not grasp hot or rotating parts.	AS00.00-Z-0005-01A
8	Pour in coolant	ℹ Warm up engine by running at moderate revs. Top up coolant constantly at coolant expansion reservoir. Close coolant expansion tank once coolant temperature is 60-70 °C.	*BF20.00-P-1001-02E
ℹ	Note on coolant level	Model 124, 129, 140, 163.113, 168, 170, 202, 208, 210, 220, 463	AH20.00-P-1142-01A
9	Inspect cooling system for leaks		AR20.00-P-1010HA

Cooling system

Number	Designation			Engine 612.963
BF20.00-P-1001-02E	Cooling system	Total capacity	Liter	Y 11.0
		Filling capacity of anticorrosion/ antifreeze agent down to -37 °C	Liter	Y 5.5
		Filling capacity of anticorrosion/ antifreeze up to -45 °C	Liter	Y 6.25
		Specifications for Operating Fluids	Sheet	BB00.40-P-0310-01A
			Sheet	BB00.40-P-0325-00A